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ABSTRACT

A LITERATURE REVIEW OF RESEARCH AND DEMONSTRATION FINDINGS BY THE ADULT BASIC EDUCATION (ABE) PRACTITIONER, CONSIDERS SOME OF THE CURRENT DOMINANT ISSUES IN RESEARCH AND DEVELOPMENT IN ADULT BASIC EDUCATION; PRESENTS FINDINGS IN THE AREAS OF ADULT INTELLIGENCE, ADULT LEARNING, METHODS FOR UNDEREDUCATED ADULTS, RECRUITMENT, CORRECTIONAL POPULATIONS, FOLLOW-UP STUDIES, SECOND GENERATION INFLUENCES, AND ACHIEVEMENT IN TRADITIONAL ABE CLASSROOMS AS OPPOSED TO LEARNING CENTERS; REFERS TO STUDIES IN PROGRESS; AND MAKES SOME RESEARCH AND RESEARCH-RELATED RECOMMENDATIONS. (NL)

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ADULT EDUCATION ASSOCIATION OF THE U.S.A.
COMMISSION ON ADULT BASIC EDUCATION
"NEW DIMENSIONS IN ADULT BASIC EDUCATION
RESEARCH AND DEMONSTRATION IN ADULT BASIC EDUCATION"

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Research funds and efforts in adult basic education (ABE) have been multiplying in the last five years. Although ABE has been at least an urban reality since the turn of the century brought waves of immigrants to our shores, the research base for decision-making in ABE programs is neither broad nor deep. Recent attempts by the U.S. Office of Education to develop research and demonstration priorities may limit some of the diffusion and duplication. This paper is oriented toward the use of research and demonstration findings by the ABE practitioner. Although not specifically mentioned, this writer always will be considering ABE in the context of womb to tomb continuing education and not as an educational entity unto itself.

This paper is divided into four main parts:

1. a discussion of some current issues in ABE
2. an overview of some of the recent research and demonstration findings which may be useful in considering the development of adult basic education (however defined zero through 8, zero through 12).
3. a mention of a few studies in progress
4. some research and particularly research-related recommendations.

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CURRENT ISSUES

First, an attempt should be made to distinguish between research and demonstration. Research might be said to be a basic or controlled design which attempts to limit variables in a systematic fashion so that something definite might be said about the influence of those variables at the conclusion of the study. Demonstration, on the other hand, tries out some innovative approach - hopefully with a defined population and with defined variables - and yields descriptive data which indicate trends. Demonstration should not be criticized as research since its aims and procedures differ from research.

Second, can the best ABE method or curriculum be defined through experimentation now or in the future? Because of the many contrasts in sub-populations with ABE clientele, staffs, organizational formats (such as traditional ABE classrooms or learning centers), and curricular materials, neither research findings nor demonstration results are generalizable to all of ABE. The "typical" ABE student or the "best" ABE curriculum cannot exist.

Third, can policy makers use the findings of research and demonstration? In this writer's view, decision-makers can gain a sense of direction, a trend, some concepts to incorporate into or at least try out in his ABE program. Critical reading of the procedures and results of research and demonstrations and a healthy scepticism in the application of those results are almost mandatory for the decision maker because of the peculiar nature of his students, his teachers, as well as such factors as local geography and fiscal limitations. However, ignoring such findings can only lead to everyone repeating the same mistakes, reinventing the same wheel, which wastes the time of a people in a

hurry - our ABE clientele.

Adult Intelligence - At the center of the ABE program is the ABE student. His characteristics define the successful program. Is he capable of learning?

The work of David Wechsler, reported in the 40's and 50's, showed a decline in human intelligence after the age of 25 (Wechsler, 1958). Wechsler's research was cross-sectional, studying a large group of subjects in a wide age range and comparing the results across ages. The longitudinal studies, for example, by Bayley and Owens, show a steady rise in intelligence over time at least to age fifty and Demming and Pressey found the same upward trend in a cross-sectional study using a test of practical adult-related tasks.(Bayley, 1966, 1967; Owens, 1966; Demming and Pressey, 1957) Reviews of the research on adult intelligence such as Botwinick's seem to conclude: (1) there is a rise in verbal (as opposed to the performance scale) of intelligence with age, and (2) there is a definite slowing with age--speed does decline.(Botwinick, 1967) There is one limitation for ABE, however: The longitudinal studies tended to lose initially less able subjects, that is, our clientele, for many reasons including death, illness, and mobility. Botwinick makes two points: (1) individual differences in adult intelligence subscores are so great when dealing with persons rather than groups that they are misleading. It is not possible to predict the individual from the group. And, I might add, intelligence tests, even nonverbal intelligence tests are highly suspect in the measurement of the undereducated adult because one way or another he must have information to perform on the test and without reading ability his chances of having that information are limited. A study

done in South Bend, Indiana, showed variable gains on different tests with thirty-six weeks of ABE instruction (Pallone, 1965). The average gain on the Army Beta across 106 subjects (many of whom tested so low that if initially screened for aptitude they would not have been in the program) was 9 points; on the Ammons-Ammons Quick Test with the same subjects, 19.4 points; and on the California Short Form, 20 points--that is, after 9 months the population had attained "average" intelligence.

Botwinick's second point was that the kind of test and items within the test determine the outcome. Demming and Pressey's practical tasks and Owen's verbally heavy intelligence test showed gain in adulthood; a timed test of manipulative skills and certain kinds of reasoning skill will show a sharp decline in ability with age.(Botwinick, 1969)

Adult Learning - Do adults learn differently than developing children?
Do undereducated adults learn differently than literate adults?

Two studies of adult learning have heavy implications for adult education. Canestrari found in a laboratory study that while older adults never performed as well as younger adults, the difference in learning performance between age groups was smallest when adults were allowed to pace themselves in their learning tasks, that is, the greatest learning occurred when the adult could speed up or slow down to deal with his learning aptitudes and problems (Canestrari, 1963). Monge and Gardner found that older adults out-performed all other age groups with slow pacing.(Monge and Gardner, 1969)

Another study by Basowitz and Korchin examined the difference between learning and learning behavior, that is, between learning and displaying evidence that the individual has learned. They found adults become increasingly

cautious about making mistakes, omitting test items, for example, rather than chancing failure. (Basowitz and Korchin, 1957) Botwinick further studied this seeming cautiousness in risk-taking and found that older adults would not take risks if they had a choice, but were not different in cautiousness from young adults when forced to take risks. (Botwinick 1966,1969) Karlsen found this propensity of adults to omit questionnable items as he normed the Adult Basic Learning Examination (ABLE). (Karlsen, 1969) Adults seem to fear making errors or seeming to appear incompetent. They prefer to ignore the threatening situation.

The Human Resources Research Organization (HumRRO) contracts to the military. HumRRO looked at the relationship between aptitude level and the acquisition of skills and knowledges. They found that the low ability group: (1) was slower to respond, requiring different pacing again; (2) took two to four times as long to attain specific criterion than the medium and high ability groups. (The high and medium ability groups functioned much alike); (3) needed more guidance and repetition of instruction; and (4) were decidedly -- two to six times -- more variable as a group in the learning of different tasks than the medium and high aptitude groups. (Fox, Taylor, and Caylor, 1969)

Other areas of recent study in adult basic education include methods, recruitment, and characteristics of prison populations, follow-up on graduates of various types of training programs, the effect of involvement in ABE on the school behavior of the second generation -- that is, what happens to the children when the parents continue their education, and achievement gains in

learning centers as compared to traditional ABE classrooms.

Methods

In a study of instructional techniques primarily for Project 100,000 personnel, who fall at the lower end of the educational continuum, HumRRO divided all of the military duties by Gagne's categories of learning and taught them to high, medium and low ability groups. (Gagne, 1965) The results were discouraging for the low ability group. Experimentation showed that the low ability group could learn most levels of abstraction and could retain, if the lecture method was avoided entirely, the tasks were presented in small steps, with simple language, with pictorial examples, with time for practice on sample items, and with immediate feedback. This population, of course, is made up of young, male adults in a captive audience. Also these young men could see the immediate applicability of their learning, a condition which seems to be particularly important for adults. (Taylor and Fox, 1967).

Recruitment

A demonstration project on recruitment conducted by the Georgia module of the Appalachian Adult Basic Education Demonstration Center (AABEDC) almost tripled enrollment in a ten county area in approximately a year. Trained VISTA workers, lay recruiters, and ABE teachers were used. Lay recruiters who were identified with the community--both successful ABE students and others--seemed to exact the most candid response from contacts, that is, the potential ABE student was more likely to express disinterest or time conflicts, but to enroll if he expressed interest. The other recruiters elicited many expressions of interest that were not followed by enrollment. However, certain ABE teachers in the project accounted for high enrollment. Through day-school contacts,

teachers often were aware of families that might benefit from ABE and therefore could be more select in their recruiting. The demonstration project has seemed to indicate: (1) the need and efficacy of trained recruiters in a rural isolated area, at least; (2) the usefulness of lay recruiters, particularly ABE-related people. There is a possibility that "outlanders" to the community may have difficulties recruiting. Certainly the VISTA workers had trouble in northern Georgia. One extremely conscientious library aide made 111 contacts, resulting in only four enrollments.

Correctional Populations

In an unpublished study, Sherk tested 100 randomly selected inmates of a correctional institution after removing those with below-average intelligence from the sample. (Sherk, 1969) Slightly less than two percent of the general American population are dyslexic. In this randomly selected sample of normal intelligence, almost twenty-five percent were definitely dyslexic--that is, they could not distinguish up from down, left from right, the letters of the alphabet, and so on. This finding follows a similar one by Shedd with a Mississippi prison population. This may indicate the need for intensive reading diagnosis, as opposed to achievement testing or grade level placement, for ABE students in correctional institutions. Alternative methods of instruction other than the traditional three R's may be in order if these findings hold up in other institutions. There are interesting sociological implications to this finding.

Follow-Up of Vocational Programs

In an ex post facto study involving a six-month and a twelve-month

follow-up of 162 young adult graduates of MDTA training, Boggs found in comparing four groups -- strictly vocational training, a combination of vocational and academic, purely academic, and control -- that: (1) the vocational, combination, and academic groups were employed significantly more than the control group; (2) the vocational and combination groups showed significantly higher employment than the purely academic groups; but (3) none of the experimental groups surpassed the control group in job-rating scores. (Boggs)

Another follow-up survey by Pucel studied the job success after the training of 192 applicants divided into technical, sales and clerical, and skilled groups. Pucel's conclusion was that one cannot use just one variable such as years of schooling or basic skills as an adequate predictor of success in MDTA training, but must develop equations of variables such as previous employment history, mobility, and so on. These two studies speak to the organization of those ABE programs which set up jobs as the end goal. Despite current legislation, not all ABE programs rationally can be vocationally oriented, but those which are apparently need a strong tie-in to vocational training. (Pucel)

Second Generation Influences

In a pilot project of the West Virginia module of the AABEDC which is conducting a long range follow-up of ABE graduates, thirteen children of ABE participants were randomly selected and studied for change in school behavior at the time of their parents' educational involvement. Eight showed a rise in achievement according to school records; four showed

decreased absenteeism, again according to school records; and four showed a decrease in disciplinary problems in the judgment of their principal and teachers. This is not to say, on the basis of this small sample, that a one-to-one relationship exists between ABE involvement and the offsprings' upgrading, although a larger, Brownsville, Texas, study showed similar results. It may suggest that ABE may be able to attack the poverty cycle in more ways than immediate vocational placement, however.

The Traditional ABE Classroom versus the Learning Center

Several recent studies have attempted to assess comparative grade level gain, as measured by standardized tests, in the learning center as opposed to the traditional ABE classroom. The learning center or lab is defined here as a facility stocked with hard and software, mostly self-directed materials, which is run by a teacher or coordinator, usually with paraprofessional aid, who: (1) helps the incoming student define his goals; (2) writes him a learning prescription that he can attack at his own pace with, perhaps, some small group activity; and (3) acts as a guide and reinforcer. The traditional ABE classroom is defined as group instruction in which the class is not individualized to any great extent.

In the Ohio module of the AABEDC a summer pilot project found .02 grade level gain per contact hour of instruction in the traditional ABE classroom as compared with .0448, or almost two and a half times, as much gain per contact hour in the learning center. North Carolina and New York report

similar findings. However, it should be noted that these are immediate posttest findings. Comparative data on long-term retention of skills and knowledge is not readily available.

Studies in Progress

Three research series in process which promise useful results are the three-year cross-sectional study of adult learning under the leadership of Monge and Gardner at Syracuse University; an ongoing series of studies on the disadvantaged adult and ABE at the Center for Occupational Education at North Carolina State University; and a thirteen-state Appalachian or mountain dialect study at the AABEDC to be used in the development of reading instruction and supplementary materials.

Recommendations for New Dimensions in Adult Basic Education

Many of the following recommendations are not new, but to have new dimensions in ABE, the field must take them seriously.

1. Lack of dissemination of findings is a major, continuing, unresolved deterrent to progress in ABE. The 309B projects under the Adult Education Act of 1966 are constantly and justifiably criticized for not sharing design and results. A viable way of obtaining time and money for communication just is not extant at present, although the ERIC system is a big step forward. Dissemination must be an overriding concern.

2. Research still tends to be too simplistic. At the beginning of this paper, research was defined as carefully controlled. However, a univariate approach to ABE which tests, for example, two teaching methods without taking into account the kind of students, teachers, learning environments, and so on, leaves so many variables unaccounted for that the results are hardly a hint. Multivariate research must be implemented.

3. While current coordination of research priorities is a kind of progress, perhaps the field needs to reconsider those priorities. The citizenry of the United States has not yet accepted responsibility for the education of adults. One gets one's education like the measles and has had it. Government policy must respond to a differentially informed and mostly uncommitted populace. Because of funding, all too often, research priorities in the nation's universities and other research centers are based on present-time public priorities which do not necessarily foster either the practice of adult education or the development of a knowledgeable profession. This is another example of dissemination difficulties in the field. It has not educated the public to its needs.

4. Should any of the current legislation proposed be passed (for example, either the Javits or Perkins bills) adult education will be on the way to obtaining the support of the public. The view of the ABE student as strictly an economic man will be on the way out. The present vocational thrust of ABE is, after all, merely an historical accident.

The legislation was developed for two years before its incorporation into the anti-poverty package. The single most important need for research in adult education is to this writer's mind not in the area of vocational success but in the development of defensible instruments to measure the impact of adult education on the disadvantaged adult's self-concept, self-esteem, attitudes, and motivation, however defined. Such instrumentation would support program evaluation in pointing the direction for needed change and adjustment of vocationally-slanted and nonvocationally-slanted ABE programs. Such research is highly specialized and interdisciplinary. It badly needs doing.

5. All of adult education needs to know more students' attitudes and behavior concerning pollution, so that a strong educational thrust can be made in this area of immediate crisis.

6. The last recommendation of this paper was said concisely by J.E. Birren at the 8th International Association of Gerontology in Washington last August. He said:

> As yet society has not evolved the role of the social engineer who takes into account results of specialized research, for example, in sociology, psychology, and anthropology for application to problems, functioning by analogy to the relation of the engineer to the physicist . . . individuals move into the area of social application without acquiring sophistication in translating basic research information into social practice.

> Perhaps one of the prospects ahead is a new type of professional person who will be trained to blend basic knowledge and application, and bridge the gap that is now apparent between research and practice in the social sciences, a gap that does not appear to exist in the physical sciences. (Birren, 1969)

The development of demonstration techniques is an attempt at evolving the kind of expertise recommended by Birren.

This paper has considered some of the current issues in research and development in adult basic education; some of the findings in the areas of adult intelligence, adult learning, methods for undereducated adults, recruitment, correctional populations, follow-up studies, second generation influences, and achievement in traditional ABE classrooms as opposed to learning centers; some studies in progress; and has made some research and research-related recommendations. It should be recognized that this paper barely touches current research and demonstration efforts. The decision-maker in ABE would be well-advised both to go to the studies to ascertain similarities between his situation and the experimental situation and experimental procedures and to consult Research in Education, monthly ERIC review of research, for new contributions to the field.

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